



STUDY OF AWARENESS REGARDING DIABETIC RETINOPATHY AMONGST DIABETIC PATIENTS IN OUT PATIENT DEPARTMENT OF TERTIARY HEALTH CARE CENTRE.

Ophthalmology

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ABSTRACT

Purpose: To study the awareness of diabetic retinopathy in diabetic patients attending opd in tertiary health care institute in Ahmedabad.

Method: Cross sectional analysis of 100 randomly selected patients of diabetes attending diabetic clinic in tertiary health care centre in Ahmedabad was done using questionnaire for awareness regarding diabetic retinopathy

Result: Among 100 patients of diabetes including 52 male and 48 female with age of 18 years to 75 years of age. Around 91% had knowledge about diabetic retinopathy. 62% patients had knowledge of risk factor leading to DR. 38% patients were aware regarding treatment availability for diabetic retinopathy from different sources. Amongst them 70% from physician, 21% from media/TV and 9% from relatives.

Conclusion: Although there is general awareness of eye complication amongst majority of diabetic patients but little or no knowledge about its risk factors and prevention mostly in uneducated and poor socio economical class. There is need for awareness of diabetic retinopathy screening; early detection and treatment option & providing Health services to patients.

KEYWORDS

Diabetic, Diabetic retinopathy, Awareness

INTRODUCTION:

Diabetic Retinopathy is an important cause of visual impairment. About 9-12 million blind people in the world. 2.6 % global blindness is because of Diabetes.¹ The prevalence of Diabetic retinopathy in India is between 7.3-25%.² Visual loss in diabetics patient is directly proportional to duration of disease and poor sugar control. 98% visual loss due to severe DR can be prevented if intervened at the right time. Diabetic retinopathy is progressive dysfunction of retinal vessels that caused by chronic hyperglycemia. After 20 years of diabetes nearly 99% of patients of type 1 and 60% of type 2 have some degree of diabetic retinopathy. Initially DR is asymptomatic if not treated it can cause low vision or blindness.

RISK FACTORS: High blood Sugar , Hypertension , Hyperlipidemia

STAGES OF DIABETIC RETINOPATHY:

- Mild Nonproliferative retinopathy
- Moderate Nonproliferative retinopathy
- Severe Nonproliferative retinopathy
- Proliferative retinopathy
- With or without Diabetic macular edema.

AIM:

- To assess the Awareness of Diabetic Retinopathy in Diabetic patients attending out patient department to report of KAP(Knowledge, attitude, practice) study which would help in promoting awareness and improving practice towards DR.

MATERIALS AND METHODS:

Cross sectional analysis of 100 Randomly selected patients of Diabetes attending Diabetic Clinic in tertiary health centre in Ahmedabad was done.

Inclusion criteria:

- 100 patients (Male-52, Female-48)
- Age: 18 years to 75 years

Exclusion criteria:

- Patients on treatment of diabetic retinopathy (laser/intravitreal injection/vitrectomised)

A Brief Questionnaires based on:

- Demographic details
- Literacy level
- Awareness of risk factor
- Treatment option
- Source of information

RESULTS:

Total 100 patients (52 male ,48 female) were studied amongst them 91% diabetic population (48 male and 42 female) had knowledge about DR.

Table:1 Knowledge of risk factor leading to DR.

Risk factor	% of patients
Duration of Diabetes	45.16
Poor sugar control	37.10
Hypertension	9.67
Smoking	4.83
High cholesterol level	3.24

62% of Diabetic patients had Knowledge of risk factor leading to DR.

Table:2 Source of information

Source of information	Percentage of patients
Physician	70
TV/other media	21
Relatives	09

Table:3 Knowledge regarding treatment availability:

Treatment Options	% of Patients
Laser	68.42
Intravitreal injection	23.68
operation/vitrectomy	7.90

38% of Diabetic patients had Knowledge regarding treatment availability

DISCUSSION

In our study although there is about 91% patients were aware about retinopathy due to Diabetes. This is similar to finding in Myanmar where retinopathy awareness rate amongst diabetic outpatients were 86%³ and in Nigeria was 84.3%.⁴ In our study 62% Diabetic patients had knowledge about various risk factors causing diabetic retinopathy were as follows: Duration of diabetes (45.16%), Poor sugar control (37.10%), Diabetes with uncontrolled Hypertension (9.67%), Associated Hypercholesterol level (3.24%) and smoking (4.83%). In our study about 70% patients attributed their source of information on DR from physician, 21% Patients from the TV and 9% from their relatives. This was demonstrated in Australia where information given by hospital nurse during home visit positively predicted the possibility of having an eye screening examination. The effect was that 77% of 11,247 diabetics underwent eye screening within 2 years.⁵ In our study 38% patients had awareness regarding treatment options of Diabetic retinopathy were as follows: laser treatment (68.42%), Intra vitreal injection (23.68%), Operative procedure like vitrectomy (7.9%). There is need for early detection of diabetic retinopathy, treatment option like Laser treatment and intravitreal injection of Anti VEGF or in advanced stage operative procedure like vitrectomy for vitreous Haemorrhage should be available to district hospital and patient should have knowledge about this treatment availabilities.

CONCLUSION:

Although there is general awareness of eye complication amongst majority of diabetic patients but little or no knowledge about its risk factors and prevention mostly in uneducated and poor

socioeconomical class. There is need for awareness of diabetic retinopathy screening; early detection and treatment option & providing health services to patients. Need for increase awareness through various diabetic retinopathy camps, distributing pamphlets, display posters and TV displays on ocular complications. early detection, treatment modalities and after that providing service to the patients of diabetes.

REFERENCES:

- 1) Cause of vision loss worldwide, 1990-2010: A Systematic Analysis. Bourne RR, Stevens GA, White RA, Smith JL, Flaxman SR, Price H et al. *Lancet Global Health* 2013;e239-e249.
- 2) Jonas JB, Nangia V, Khar A, Matin A, Bhojwani K, Kulkarni M, Prevalence and Associated Factors of Diabetic Retinopathy In Rural Central India. *Diabetes Care*. 2013;36:69.
- 3) Muecke J, S, Newland H, S, Ryan P, Ramsay E, Aung M, Myint S. et al. Awareness of diabetic Eye Disease Among General Practitioners And Diabetic Patients in Yangon, Myanmar. *Clin & Experimental of Ophthalmol*, 2008; 36(3);265-273.
- 4) Mohammed I, Waziri A M. Awareness of Diabetic Retinopathy Amongst Diabetic patients at the Murtala Mohammed Hospital, Kano, Nigeria. *Niger med J*. 2009;50:38-41.
- 5) Tapp R, J, Grad D, Zimmet P, Z, Harper C, A, de Courten M, Balkau P, et al. Diabetes Care in an Australian population Frequency of screening Examinations For Eye And Foot Complications of Diabetes, *Diabetes Care*. 2004; 27; 688-69